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Substitute for form 1449/PTO

10586510 - GAU: 1797

PTO/SB/08A (07-05)

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🔩 INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known					
Application Number	10/586,510				
Filing Date	July 18, 2006				
First Named Inventor	Yigong He et al.				
Art Unit	1764				
Examiner Name	not yet assigned				
Attorney Docket Number	31411/04002				

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'	Sheet	1	of 4		Attorney Docket Number	31411/04002
BTRAD	e i			II S PATENT	DOCUMENTS	
	Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (f known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee Applicant of Cited Doc	
18	TPE		<sup>US-</sup> 3,549,557	12/22/1970	Bolton et al.	
	Í	图	<sup>US-</sup> 3,644,565	02/22/1972	Biale	
/ ni	1 9 1 200	1.5	<sup>US-</sup> 3,647,916	03/07/1972	Ceaser et al.	
12	3 1 200	) <sub>(14</sub>	<sup>US-</sup> 3,917,738	11/04/1975	Fenske et al.	
(FE	MADEMAR	\$	<sup>US-</sup> 3,962,133	06/08/1976	Rodewald	
<b>√</b> \$	PADEMAR		<sup>US-</sup> 4,116,880	09/26/1978	Olah	
			<sup>US-</sup> 4,384,161	05/17/1983	Huang	
			<sup>US-</sup> 5,012,033	04/30/1991	Child et al.	
			<sup>US-</sup> 5,120,897	06/09/1992	Del Rossi et al.	
			<sup>US-</sup> 5,157,196	10/20/1992	Crossland et al.	
			<sup>US-</sup> 5,157,197	10/20/1992	Cooper et al.	
			<sup>US-</sup> 5,190,904	03/02/1993	Crossland et al.	
			<sup>US-</sup> 5,220,095	06/15/1993	Hommeltoft et al.	
			US- 5,221,777	06/22/1993	Huss, Jr. et al.	
			US- 5,245,101	09/14/1993	Del Rossi et al.	
			<sup>US-</sup> 5,288,685	02/22/1994	Kallenbach et al.	
			<sup>US-</sup> 5,324,881	06/28/1994	Kresge et al.	
			<sup>US-</sup> 5,346,676	09/13/1994	Crossland et al.	
			<sup>US-</sup> 5,364,976	11/15/1994	Kallenbach	

		FORE	IGN PATENT DOCL	IMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document			Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> ( <i>if known</i> )	MM-DD-YYYY		Or Relevant Figures Appear	Τ <sup>6</sup>
		CN 1062307	07/01/1992	Cooper		
		CN 1125639	07/03/1996	Yue		
		CN 1125640	07/03/1996	Yue		
		CN 1184797	06/17/1998	He		
		CN 1232814	10/27/1999	He		
		CN 1246467	03/08/2000	Xie		

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Signature	/Thuan Dang/ (07/04/2009)	Considered	

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Complete if Known Substitute for form 1449/PTO **Application Number** 10/586,510 Filing Date July 18, 2006 INFORMATION DISCLOSURE First Named Inventor Yigong He et al. STATEMENT BY APPLICANT Art Unit 1764 (Use as many sheets as necessary) **Examiner Name** not yet assigned Attorney Docket Number 31411/04002

			U. S. PATENT	F DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (of known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		<sup>US-</sup> 5,391,527	02/21/1995	Kojima et al.	
		<sup>US-</sup> 5,475,178	12/12/1995	Del Rossi et al.	
		<sup>US-</sup> 5,489,729	02/06/1996	Benazzi et al.	
		<sup>US-</sup> 5,731,256	03/24/1998	Benazzi et al.	
		<sup>US-</sup> 5,739,074	04/14/1998	Kocal et al.	
		<sup>US-</sup> 6,103,947	08/15/2000	Barger	
		US-			
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		FORE	IGN PATENT DOCL	JMENTS		
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		CN 1331065	01/16/2002	China Petroleum		
		CN 1340491	03/20/2002	China Petroleum		
		EP 714 871	06/05/1996	Haldor Topsoe		
		GB 1389237	04/03/1975	Universal Oil Products		
		GB 1432720	04/22/1976	Mobil Oil Corporation		
		JP 1245853	10/02/1989	Teikichi		

Examiner		Date
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Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	۲
		WO 94/03415	02/17/1994	Mobil Oil		
		WO 95/26815	10/12/1995	Exxon Chemical		
		WO 05/070854	08/04/2005	China Petroleum & Chemica		
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Examiner Signature	/Thuan Dang/ (07/04/2009)	Date Considered	

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Substitu	Substitute for form 1449/PTO			Complete if Known			
	10 10 10 111 1440/1 10			Application Number	10/586,510		
INF	ORMATION	DIS	CLOSURE	Filing Date	July 18, 2006		
STA	ATEMENT E	BY A	PPLICANT	First Named Inventor	Yigong He et al.		
	(Use as many she	ante se n	acassary)	Art Unit	1764		
	·	eta da n	ecessary)	Examiner Name	not yet assigned		
Sheet	4	of	4	Attorney Docket Number	31411/04002		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		International Search Report from PCT/CN2005/000087 dated May 19, 2005.	
		Hutson, Jr, Thomas et al "Phillips HF Alkylation Process for Alkylation of C3 C4 and C5 Olefins" pp I-23 - I-28, Chapater 1.2 Handbook of Petroleum Refining Processes, 1996.	
		Albright, LF et al "Alkylation of Isobutane with C4 Olefins. 1. First-Step Reactions Using Sulfuric Acid Catalyst", Ind Eng Chem Res 1988, 27, 381-386.	
		Albright, LF et al "Alkylation of Isobutane with C4 Olefins. 2. Production and Characterization of Conuunct Polymers", Ind Eng Chem Res 1988, 27, 386-391.	
,		Albright, LF et al "Alkylation of Isobutane with C4 Olefins. 3. Two-Step Process Using Sulfuric Acid as Catalyst", Ind Eng Chem Res 1988, 27, 291-397.	
		Oil Refining Technology in China, China Petrochemical Press, pp. 206-217, 1991.	
		Written Opinion from PCT/CN2005/00087 dated May 19, 2005.	
		International Preliminary Report on Patentability from PCT/CN2005/00087 dated December 21, 2005.	
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